DOCUMENT RESUME

ED 257 810 SP 026 143

AUTHOR Killian, Joyce E.; McIntyre, D. John
TITLE The Influence of Cooperating Teachers' Supervisory Training and Experience on Teacher Development during Early Field Experiences.
PUB DATE 4 Apr 85
NOTE 21p.; Paper presented at the Annual Meeting of the American Educational Research Association (69th, Chicago, IL, March 31-April 4, 1985).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cooperating Teachers; *Feedback; *Field Experience Programs; Higher Education; Interpersonal Competence; Preservice Teacher Education; Student Teaching; *Supervisory Training; *Teacher Student Relationship
IDENTIFIERS Early Field Experiences; Process Analysis

ABSTRACT

The influence of supervisory training and experience as a cooperating teacher on the cooperating teacher's role as an instructional supervisor for early field experience students (FES's) was studied. Recent research has indicated that cooperating teachers tend to provide inadequate feedback and avoid negative comments. Their FES's appeared to have only brief, impersonal interactions with children and avoided conflict and substantive discussion. Two groups of FES's were subjects of the study. One group worked with 11 cooperating teachers who had completed a graduate course on the supervision of preservice teachers; the other with 25 cooperating teachers who had had no previous formal supervisory training. Students were asked each week to describe the types of activities in which they had been engaged and the types of interactions they had with the cooperating teacher and pupils. One major finding was that trained cooperating teachers were much more likely to provide feedback concerning the FES's performance. The implications of the study are discussed, and it is suggested that further study of the training of cooperating teachers in supervisory methods be conducted. Data obtained from the study are presented in appended tables. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED257810

THE INFLUENCE OF COOPERATING TEACHERS' SUPERVISORY TRAINING AND EXPERIENCE ON TEACHER DEVELOPMENT DURING EARLY FIELD EXPERIENCES

Joyce E. Killian and D. John McIntyre
Curriculum, Instruction and Media
Southern Illinois University
Carbondale, IL 62091

Paper presented at the Annual Meeting of
The American Educational Research Association
April 4, 1985
Chicago

SP026143

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J.E. Killian

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

THE INFLUENCE OF COOPERATING TEACHERS' SUPERVISORY TRAINING AND EXPERIENCE ON TEACHER DEVELOPMENT DURING EARLY FIELD EXPERIENCES

Traditionally, the supervision of field experiences in teacher education has been viewed as a triad composed of a preservice teacher, cooperating teacher and university supervisor (Yee, 1969). Although the accepted assumption has been that the three triadic members work closely together on common goals intended to produce appropriate teacher behavior, it is not surprising that most of the research on field experience supervision examines the cooperating teacher's influence on the preservice student since this pair spend the most time together.

The majority of preservice teachers view their cooperating teachers as being the most significant influence during their student teaching experience (Karmos & Jacko, 1977; Manning, 1977). This influence seems to be most apparent in the shaping of a preservice teacher's attitudes and behaviors. There is abundant research which appears to indicate that preservice teachers tend to adjust their values, attitudes and behaviors toward those of their cooperating teachers.[1] Yet, as McIntyre (1984) points out, this gravitation toward the cooperating teacher's perspective is not necessarily a positive change. In fact, students' attitudes seem to become more custodial and negative during field experiences.

Despite the importance of and focus on the cooperating teacher, there have been relatively few research studies examining the role and performance of the cooperating teacher as a supervisor within the triad. This study focuses on the cooperating teacher's performance as a supervisor. Specifically, the authors examine the influence of supervisory training and experience as a cooperating teacher on the cooperating teacher's role as an instructional supervisor.

Research on Cooperating Teacher as Supervisor

Recent research has examined several aspects of the cooperating teacher's performance as a supervisor. Several studies focus on the cooperating teacher's willingness and ability to review preservice teacher's performance and to provide feedback related to that performance. For example, Zimpher, deVoss and Nott (1980) reported that cooperating teachers in general do not review students' work critically nor are they interested in observing student teachers. In addition, the study found that cooperating teachers tended to avoid critical evaluations and negative remarks. The data of the cooperating teacher's inability to provide adequate feedback and to avoid negative comments is supported by several additional studies (Andrews, 1967; Lipke, 1979; Mills, 1980; Tabachnick, Popkewitz & Zeichner, 1979-80). In fact, Fink (1976) reported evidence that cooperating teachers tended to write positive evaluations of preservice teachers without observing them.

Tabachnick, Popkewitz and Zeichner (1979-80) examined student teacher's activity in the classroom as directed by the cooperating teacher. They discovered that student teachers were involved in a narrow range of classroom activities, over which they had little control. Their teaching was routine and mechanical, and became equated with moving children through prescribed lessons in a given period of time. Further, student teachers' interactions with children were brief and impersonal, usually related to the task at hand. Their interactions with cooperating teachers revealed conscious avoidance of conflict and substantive discussion. Preservice teachers' low status, punctuated by the institutional pressure to move children through prescribed lessons on time and in an orderly manner, prevented serious reflection upon performance.

Another issue of concern is raised by Erdman (1983), who states that, although the cooperating teacher has the most contact with the preservice teacher in the school, it is also the cooperating teacher who has the least amount of knowledge about the intention of the experience and the ability of the preservice teacher. In addition, Applegate and Lasley (1982) reported that cooperating teachers do not view themselves as responsible for career exploration or socialization, yet both occur during field experience. As a result of these findings, there have been numerous appeals for teacher education programs to include formalized training for cooperating teachers (Applegate & Lasley, 1982; Copas, 1984; Lasley & Applegate, 1984; Lipke, 1979; Lowther, 1968; McIntyre, 1983; McIntyre & Norris, 1980). Despite these recommendations, Haberman and Harris (1982) reported that twenty-four states have no requirements for cooperating teachers and that only nine states require a program or course related to the supervision of student teachers be completed prior to or during a teacher's service as a cooperating teacher. McIntyre and Norris (1980b) reported that most cooperating teachers receive their training through informational meetings or printed materials. In spite of this research, data do not exist that examine the impact of the training of cooperating teachers in supervision on the preservice teacher's field experience.

The purpose of this paper is to examine how the training status of cooperating teachers influenced the activities engaged in by early field experience students (FES's) and the types of interactions they engaged in with their cooperating teachers and their students. In addition, the authors also will report findings on the influence of experience as a cooperating teacher on these same activities and interactions.

Methodology

This report is a segment of a longitudinal study on teacher development conducted as preservice teachers progressed through their field experiences in their teacher education program. In this case, the research reports data collected during Level I, the first early field experience semester.

The subjects were juniors who had been placed in one of two teacher education centers affiliated with Southern Illinois University at Carbondale. The FES's spent a half-day a week in an elementary or secondary classroom for fourteen weeks. Since the FES's were placed with their respective cooperating teachers by the Office of Teacher Education, the researchers had no control as to whether the cooperating teacher was trained or experienced as a supervisor. Trained teacners were the eleven cooperating teachers who had completed a three-hour graduate credit course on the supervision of preservice teachers; untrained teachers were the twenty-five who had had no previous formal supervisory training.

During each week of the semester, students were asked to describe the types of activities in which they had engaged, and the types of interaction with the cooperating teacher and students. These open-ended responses were later categorized for analysis. In order to reflect development during the semester, data were analyzed separately for the first and second halves of the semester. Percentages were computed for each category and tests of significance were used for statistical comparisons. Paired t-tests were used for longitudinal comparisons of the effects of the cooperating teachers' training status on percentages of activities and interactions. For the experience data, where cooperating teachers were placed on a continuum of experience, measures for correlation were used.

Cooperating teachers were also categorized according to their experience level on a continuum from 1 to 3. Eight cooperating teachers had no prior FES placements; seven had occasional placements; and twenty had frequent placements.

Analysis

Data indicate that both training status and experience level of cooperating teachers had substantial influence upon the early field experience. These effects are evident, both in statistically significant differences between groups and in percentage data collected about the frequency of engagement in the various activities and interactions.

Training Status of the Cooperating Teacher. Table 1 reports the effect of the cooperating teacher's training status on the types of activities engaged in by FES's during the semester. The percentage of occasions on which FES's engaged in full group teaching during the first half of the semester was significantly higher for those placed with trained cooperating teachers. Though other comparisons did not reach a level of statistical significance, the percentages offer some descriptive insight into the nature of the early field experience for each group. During both halves of the semester, FES's placed with trained cooperating teachers were involved in more preparation and planning, more routine that involved interacting with students, and more small and full group teaching. On the other hand, those FES's with untrained cooperating teachers spent substantially more time involved in routine which included no interaction with students than those with trained teachers. In short, it appears that FES's with trained cooperating teachers not only spent more time preparing and planning but also spent more time interacting with students in both teaching and non-teaching activities.

The effect of training on the types of interactions FES's have with their cooperating teachers also revealed some differences (Table 2). During the second half of the semester, FES's with trained cooperating teachers had a significantly higher percentage of interactions with them in the areas of planning/preparation and discussion of FES performance. These findings appear to parallel the types of activities FES's engaged in during the semester. Since trained cooperating teachers seem to have encouraged more "teaching time" for the FES, there was more opportunity for planning and for discussing the FES's performance. Though not statistically significant, comparison of percentages indicate that FES's with untrained cooperating teachers may have had more interaction focusing on the cooperating teacher's teaching and management techniques.

Although there are no statistically significant differences in the analysis of the effect of the cooperating teacher's training or the types of interactions FES's have with students, trends may be apparent in the percentages (Table 3). Briefly, it appears that FES's placed with trained cooperating teachers may have had more of an opportunity to interact with students than FES's with untrained cooperating teachers. FES's with trained cooperating teachers seem to have had more interaction with students involving social conversation, classroom routine, and individual, small and full group teaching than their counterparts. On the other hand, there appears to be a high percentage of "no interaction with students" reported by FES's with untrained cooperating teachers during both halves of the semester.

Experience Level of the Cooperating Teacher. The data on the types of activities engaged in by FES's reveal only one significant correlation between a high level of supervisory experience and a high level of engagement (Table 4). In the category of "observation of other teachers" during the

second half of the semester, there was a negative correlation between supervisory experience and frequency of observation of other teachers. That is, the more experienced the cooperating teacher, the less likely he/she was to send the FES to observe in other classrooms. Descriptive trends may also be worth consideration. In this category, it appears that FES's placed with cooperating teachers with no prior supervisory experience were engaged in less interaction with students than their counterparts placed with cooperating teachers with either occasional or frequent prior placements. Perhaps this is the result of their lack of experience and knowledge of expectations of their FES.

The data concerning the types of interaction FES's have with the cooperating teacher reveal two significant relationships when examined by supervisory experience (Table 5). There was a positive correlation between a high level of supervisory experience and a high frequency of social conversation between the cooperating teacher and the FES during the first half of the semester. During the second half of the semester, there was a negative correlation between experience and discussion of the cooperating teacher's own teaching and management. That is, the more experienced the cooperating teacher, the less likely he/she was to discuss his/her own teaching and management. Trends which may also provide insight include the following descriptive differences in percentages. During the second half of the semester, cooperating teachers with frequent supervisory experience did have more interaction regarding the field experience student's performance but, ironically, also had more instances of no interaction. FES's with cooperating teachers who have had frequent placements experience less interaction regarding their teacher's teaching or management strategies than their counterparts. This data parallels that of FES's placed with trained cooperating teachers.

The results comparing FES's placed with cooperating teachers at various levels of supervisory experience are presented in Table 6. During the first half of the semester, there was a positive correlation between a high level of supervisory experience and a high level of FES engagement of "classroom routine" interactions with students. Thus, more experienced cooperating teachers were likely early in the semester to help FES's engage in school-related interactions with their students. Descriptive percentages which may indicate trends also include the figures on interaction with individuals, small and full groups. Although the FES's with less experienced cooperating teachers appear to have more interaction with individual students, their counterparts placed with experienced cooperating teachers are involved in more classroom routine and more small or full group teaching.

Discussion and Implications

This study examined the influence of training and experience of cooperating teachers on teacher development during early field experiences. It does appear that both variables - although training to more of an extent - influence the FES's experience. However, it also appears that the amount of experience, either occasional or frequent, is not as important as simply gaining that first experience. In other words, there were few differences between cooperating teachers who had worked with FES's occasionally or frequently. Once cooperating teachers have the first experience with an FES, they appear to behave much alike as supervisors.

FES's that are placed with trained or experienced cooperating teachers have more interaction with students during early field experiences. It may be that untrained and inexperienced cooperating teachers have, as Applegate

and Lasley (1984) assert, established expectations or goals for themselves and their FES that are either unrealistic or unattainable. Subsequently, it would seem that trained and experienced cooperating teachers have a more realistic set of expectations for their FES, have a better understanding of the university's expectations and more confidence in their own ability as a supervisor.

Perhaps the major finding of this study is that trained cooperating teachers are much more likely to provide feedback concerning the FES's performance. The need for feedback on one's performance to promote growth is necessary in any profession. However, the data in teacher education reveals that cooperating teachers tend to avoid providing evaluative comments, especially negative ones, to the FES (Lipke, 1979; Lowther, 1988; Mills, 1980; Tabachnick, Popkewitz & Zeichner, 1979-80). This does not appear to be true for trained cooperating teachers. Although the type and quality of feedback given by trained cooperating teachers is not imbedded in these data, it is clear that cooperating teachers who have been trained in supervisory techniques did provide significantly more feedback than untrained cooperating teachers. When one combines this data with the previously reported finding that FES's with untrained cooperating teachers reported a higher percentage of no interaction with their teacher, there would appear to be a strong appeal toward training cooperating teachers in supervision.

Although the training of cooperating teachers does appear to have a positive influence on the early field experiences of FES's in teacher education, further research is necessary to understand this relationship. One limitation of the present research is that only a third of the cooperating teachers (n=11) could be classified as "trained" supervisors.

Further investigation with larger numbers of trained teachers would improve the reliability and generalizability of data collected about the influence of the training status of the cooperating teacher on the field experience.

Another important consideration about the training of cooperating teachers is raised by Zeichner (1979), who pointed out that learning new techniques, without corresponding changes in roles and power structures, would change more than the surface of supervisory relationships. He states that, although cooperating teachers may gain analytical and communicative skills from such training, they still must confront preservice teachers who appear to insulate themselves from criticism. More must be discovered about what and how feedback is provided by trained and untrained cooperating teachers. In addition to examining the amount of interaction FES's have with students, it also is important to analyze the quality of interaction provided by trained and untrained cooperating teachers.

When examining findings related to a teacher education program, one cannot interpret the data without considering the nature of the program that provides the context for the research (Becher & Ade, 1982; Tabachnick & Zeichner, 1984). If the training program emphasizes communication and supervisory skills, then one can expect improvement in those areas. However, if the training does not emphasize skills that promote reflective thinking among FES's, then one cannot expect that skill to be prevalent among preservice teachers. Furthermore, one also must consider the structure of the early field experience program. When and how often an FES is placed in a classroom may determine the extent of his/her involvement with teaching opportunities, students and cooperating teachers.

In summary, this study attempted to examine the influence of cooperating teachers' training and experience as supervisors on teacher development during early field experiences. It does appear that both variables have a positive influence but that training seems to have the greater impact and holds more possibility for further study. Before recommending that the training of cooperating teachers be mandatory, the authors suggest further in-depth study of the relationship between training and teacher development at the preservice stage. In addition, a study of the influence of training and experience should be conducted during student teaching in order to determine whether the influence remains as strong during this segment of teacher education.

References

Andrews, L. O. (1967). "A curriculum to produce career teachers for the 1980's." Theory Into Practice, 6(5), 236-245.

Applegate, J. H. and Lasley, T. J. (1982). "Cooperating teachers' problems with preservice field experience students." Journal of Teacher Education, 33(2), 15-18.

Applegate, J. H. and Lasley, T. J. (1984). "What cooperating teachers expect from preservice field experience students." Teacher Education, in press.

Becher, R. [illegible], W. (1982). "The relationship of field placement characteristics and students' potential field performance abilities to clinical experience performance ratings." Journal of Teacher Education, 33(2), 24-30.

Copas, E. M. (1984). "Critical requirements for cooperating teachers." Journal of Teacher Education, 35(6), 49-54.

Erdman, J. I. (1983). "Assessing the purposes of early field experience programs." Journal of Teacher Education, 34(4), 27-31.

Haberman, M. and Harris, P. (1982). "State requirements for cooperating teachers." Journal of Teacher Education, 33(3), 45-47.

Karmos, A. H. and Jacko, C. M. (1977). "The role of significant others during the student teaching experience." Journal of Teacher Education, 28(5), 51-55.

Lipke, B. S. (1979). "Give your (student) teachers a break." Journal of Teacher Education, 30(2), 31-34.

Lowtner, M. A. (1968). "Most and least helpful activities of supervisory teachers." Clearing House, 43(1), 40-43.

Manning, D. T. (1977). "The influence of key individuals on student teachers in urban and suburban settings." Teacher Educator, 12(3), 2-8.

McIntyre, D. J. (1983). Field experiences in teacher education: from student to teacher. Washington, D. C.: Foundation for Excellence in Teacher Education and ERIC Clearinghouse on Teacher Education.

McIntyre, D. J. (1984). "A response to the critics of field experience supervision." Journal of Teacher Education, 35(3), 42-45.

McIntyre, D. J. and Norris, W. R. (1980). "Research on the student teaching triad." Contemporary Education, 51(4), 193-196.

McIntyre, D. J. and Norris, W. R. (1980). "The state of the art of pre-service teacher education programs and supervision of field experiences." Action in Teacher Education, 2(3), 67-69.

Mills, J. R. (1980). "A guide for teaching systematic observation to student teachers." Journal of Teacher Education, 31(6), 5-9.

Tabachnick, B. R., Popkewitz, T. S. and Zeichner, K. M. (1979-80). "Teacher education and professional perspectives of student teachers." Interchange on Educational Policy, 10(4), 12-29.

Tabachnick, B. R. and Zeichner, K. M. (1984). "The impact of the student teaching experience on the development of teacher perspectives." Journal of Teacher Education, 35(6), 28-36.

Yee, A. (1969). "Do cooperating teachers influence the attitudes of student teachers?" Journal of Educational Psychology, 60(4), 327-332.

Zeichner, K. M. (1979). "The dialectics of teacher socialization." Paper presented at the annual meeting of the Association of Teacher Educators, Orlando, FL.

Zimpher, N. L., deVoss, G. G. and Nott, D. L. (1980). "A closer look at university student teacher supervision." Journal of Teacher Education, 31(4), 11-15.

Reference Note

[1]Space does not permit an adequate review of the research on field experiences in teacher education. A comprehensive review of this research in this area appears in McIntyre (1983).

TABLE 1

EFFECT OF COOPERATING TEACHER'S TRAINING STATUS ON PERCENTAGE OF OBSERVATIONS DURING WHICH STUDENT ENGAGES IN EACH TYPE OF ACTIVITY

Activity	First Half		Second Half	
	Trained (n=11)	Untrained (n=25)	Trained (n=11)	Untrained (n=25)
Observation of Cooperating Teacher	86.4	88.0	78.5	78.0
Observation of Other Teachers	14.8	9.2	10.4	10.5
Routine-Non-Interactive	36.9	53.6	38.5	52.8
Preparation or Planning	16.1	6.8	16.0	9.2
Routine-Interactive	37.6	34.1	39.2	30.2
Teaching-Individual	31.8	22.4	29.5	30.0
Teaching-Small Group	10.7	8.4	21.6	11.6
Teaching-Full Group	18.5	5.2*	36.6	20.3

*$p < .05$

TABLE 2

EFFECT OF COOPERATING TEACHER'S TRAINING STATUS ON PERCENTAGE OF OBSERVATIONS DURING WHICH STUDENT OBSERVER ENGAGES IN EACH TYPE OF INTERACTION WITH COOPERATING TEACHERS

Type of Interaction with Cooperating Teacher	First Half		Second Half	
	Trained (n=11)	Untrained (n=25)	Trained (n=11)	Untrained (n=25)
No Interaction	7.8	3.9	5.2	7.1
Social Conversation	23.3	20.0	16.5	20.2
General Education Discussion	39.1	31.7	22.5	21.5
Individual Students	14.0	18.0	7.7	8.6
CT's Teaching Management	23.1	32.1	10.6	24.6
Planning or Preparation	39.0	23.4	43.5	21.5*
ST's Performance	3.4	2.5	29.2	15.0*

*$p < .05$

TABLE 3

EFFECT OF COOPERATING TEACHER'S TRAINING STATUS ON PERCENTAGE OF OBSERVATIONS DURING WHICH STUDENT OBSERVER ENGAGES IN TYPE OF INTERACTION WITH STUDENTS

Type of Interaction with Students	First Half		Second Half	
	Trained (n=11)	Untrained (n=25)	Trained (n=11)	Untrained (n=25)
No Interaction	9.8	22.9	3.1	14.8
Social Conversation	26.1	31.0	35.5	29.9
Classroom Routine	25.5	20.1	28.2	24.6
Individual	40.6	42.4	31.6	27.1
Small Group	9.1	5.9	12.9	4.6
Full Group	20.9	9.6	32.0	20.1

TABLE 4

EFFECT OF COOPERATING TEACHER'S SUPERVISORY EXPERIENCE ON PERCENTAGE OF OBSERVATIONS DURING WHICH STUDENT ENGAGES IN EACH TYPE OF ACTIVITY

	First Half			Second Half		
Activity	No Prior Placements	Occasional Placements	Frequent Placements	No Prior Placements	Occasional Placements	Frequent Placements
Observation of Cooperating Teacher	86.9	92.1	86.1	75.6	74.9	80.1
Observation of Other Teachers	17.5	17.6	6.2	25.6	15.3	3.8*
Routine-Non-Interactive	55.4	52.4	44.6	57.4	42.1	47.3
Preparation or Planning	12.9	9.4	7.5	21.9	-0-	11.6
Routine-Interactive	25.8	29.0	40.8	30.0	30.7	34.8
Teaching-Individual	34.4	18.2	24.1	28.3	26.0	31.7
Teaching-Small Group	15.9	2.4	8.8	9.6	5.7	19.5
Teaching-Full Group	7.3	7.6	10.7	14.5	35.0	25.6

*$r = -.51$ $p < .01$

TABLE 5

EFFECT OF COOPERATING TEACHER'S SUPERVISORY EXPERIENCE ON PERCENTAGE OF OBSERVATIONS DURING WHICH STUDENT OBSERVER ENGAGES IN EACH TYPE OF INTERACTION WITH COOPERATING TEACHER

	First Half			Second Half		
Type of Interaction With Cooperating Teacher	No Prior Placements	Occasional Placements	Frequent Placements	No Prior Placements	Occasional Placements	Frequent Placements
No Interaction	4.6	2.9	6.0	4.7	4.9	7.7
Social Conversation	8.4	8.1	30.1*	10.0	15.9	23.1
General Educational Discussion	44.4	42.9	27.0	35.6	13.0	20.2
Individual Students	17.1	27.6	13.0	9.7	14.6	5.8
CT's Teaching Management	24.3	41.0	27.4	29.9	37.7	11.1**
Planning or Preparation	26.6	21.6	31.0	20.9	37.7	27.9
ST's Performance	4.3	2.4	2.3	12.9	16.9	22.5

*$r = .39$ $p < .05$

**$r = -.46$ $p < .01$

TABLE 6

EFFECT OF COOPERATING TEACHER'S SUPERVISORY EXPERIENCE ON PERCENTAGE OF OBSERVATIONS DURING WHICH STUDENT OBSERVER ENGAGES IN EACH TYPE OF INTERACTION WITH STUDENTS

Type of Interaction With Students	First Half			Second Half		
	No Prior Placements	Occasional Placements	Frequent Placements	No Prior Placements	Occasional Placements	Frequent Placements
No Interaction	27.9	21.6	14.6	22.4	4.9	9.5
Social Conversation	13.8	46.3	29.9	20.0	43.3	31.7
Classroom Routine	9.1	20.6	26.9*	17.6	16.9	31.4
Individual	60.5	30.3	38.6	46.0	23.1	24.5
Small Group	7.5	2.9	8.0	2.4	5.7	9.3
Full Group	1.8	20.0	15.1	17.7	34.3	22.4

* $F = .33$ $p < .05$